

**OHIO  
PUBLIC WORKS**  
For You

APPLICATION FOR FINANCIAL ASSISTANCE

Revised 7/93

*CBOSA*

**IMPORTANT:** Applicant should consult the "Instructions for Completion of Project Application" for assistance in the proper completion of this form.

SUBDIVISION: DELHI TOWNSHIP CODE# 061 - 21504

DISTRICT NUMBER: 2 COUNTY: HAMILTON DATE: 08/28/96

CONTACT: ROBERT W. BASS PHONE #: (513) 922-8609

(THE PROJECT CONTACT PERSON SHOULD BE THE INDIVIDUAL WHO WILL BE AVAILABLE ON A DAY-TO-DAY BASIS DURING THE APPLICATION REVIEW AND SELECTION PROCESS AND WHO CAN BEST ANSWER OR COORDINATE THE RESPONSE TO QUESTIONS)

PROJECT NAME: Fehrwood Subdivision Reconstruction

**SUBDIVISION TYPE**

(Check Only 1)

- ☐ 1. County  
☐ 2. City  
☒ 3. Township  
☐ 4. Village  
☐ 5. Water/Sanitary District  
(Section 6119 O.R.C.)

**FUNDING TYPE REQUESTED**

(Check All Requested & Enter Amount)

- ☒ 1. Grant \$660,636.00  
☐ 2. Loan \$            
☐ 3. Loan Assistance \$            
MBE SET-ASIDE OFFERED  
Construction \$            
Procurement \$

**PROJECT TYPE**

(Check Largest Component)

- ☒ 1. Road  
☐ 2. Bridge/Culvert  
☐ 3. Water Supply  
☐ 4. Wastewater  
☐ 5. Solid Waste  
☐ 6. Stormwater

TOTAL PROJECT COST: \$734,040

FUNDING REQUESTED: \$660,636.00

**DISTRICT RECOMMENDATION**

To be completed by the District Committee ONLY

GRANT: \$ 660,636.00

LOAN: \$            %           

LOAN ASSISTANCE: \$           

TERM:            yrs. (Attach Loan Supplement)

(Check Only 1)

- ☒ State Capital Improvement Program  
☐ Local Transportation Improvements Program  
☐ Small Government Program

**DISTRICT MBE SET-ASIDE**

Construction \$             
Procurement \$           

**FOR OPWC USE ONLY**

PROJECT NUMBER: C            / C           

Local Participation            %

OPWC Participation            %

Project Release Date:        /        /       

OPWC Approval:                           

APPROVED FUNDING: \$                           

Loan Interest Rate:                           

Loan Term:                            years

Maturity Date:                           

Date Approved:        /        /

## 1.0 PROJECT FINANCIAL INFORMATION

### 1.1 PROJECT ESTIMATED COSTS:

(Round to Nearest Dollar)

- a.) Project Engineering Costs:
1. Preliminary Engineering \$ 0.00
  2. Final Design \$ 0.00
  3. Other Engineer Services \* \$ 0.00
  - Supervision \$ 0.00
  - Miscellaneous \$ 0.00
- b.) Acquisition Expenses:
1. Land \$ 0.00
  2. Right-of-Way \$ 0.00
- c.) Construction Costs: \$ 695,505.00
- d.) Equipment Purchased Directly: \$ 0.00
- e.) Other Direct Expenses: \$ 0.00
- f.) Contingencies: \$ 38,535.00
- g.) TOTAL ESTIMATED COSTS: \$ 734,040.00

MBE Force Account  
\$ \$

### 1.2 PROJECT FINANCIAL RESOURCES:

(Round to Nearest Dollar and Percent)

- a.) Local In-Kind Contributions \$ 0.00 0%
- b.) Local Public Revenues \$ 73,404.00 10%
- c.) Local Private Revenues \$ 0.00 0%
- d.) Other Public Revenues
1. ODOT PID# \$ 0.00 0%
  2. EPA/OWDA \$ 0.00 0%
  3. OTHER \$ 0.00 0%

SUB TOTAL LOCAL RESOURCES: \$ 73,404.00 10%

- e.) OPWC Funds
1. Grant \$ 660,636.00 90%
  2. Loan \$ 0.00 0%
  3. Loan Assistance \$ 0.00 0%

SUB TOTAL OPWC RESOURCES: \$ 660,636.00

f.) TOTAL FINANCIAL RESOURCES: \$ 734,040.00 100%

\*Other Engineer's Services must be outlined in detail on the required certified engineer's estimate.

### 1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a summary from the Chief Financial Officer listed in section 5.2 listing all local share funds budgeted for the project and the date they are anticipated to be available.

## 2.0 PROJECT INFORMATION

**IMPORTANT:** If project is multi-jurisdictional, information must be consolidated in this section.

2.1 PROJECT NAME: FEHRWOOD SUBDIVISION RECONSTRUCTION

2.2 BRIEF PROJECT DESCRIPTION - (Sections a through d):

a: SPECIFIC LOCATION:

Three street subdivision is located off of Orchardview Lane. Orchardview runs south off of Foley Road between Greenwell and Pedretti Roads.

PROJECT ZIP CODE: 45238

b: PROJECT COMPONENTS:

Project consists of full depth removal of roadway and curbs, undercutting existing subgrade to obtain proper depth for replacement on a 10" stone base, 5" of asphalt pavement, rolled concrete curb and gutter (30") and underdrains at all low points; sidewalk and driveway repair or replacement; and associated utility work. It also includes replacement of an undersized and functionally obsolete drainage system in the rear yards of 4702, 4708 and 4716 Shadylawn to correct severe residential flooding.

c: PHYSICAL DIMENSIONS / CHARACTERISTICS:

Current roadways are 25' in width. Sidewalks are located within the right of way. Claymore and Shadylawn were overlaid in 1978 and continue to mask joint and roadway faulting which is evident on Angelnook. Water ponds on roadway due to uneven and broken slobbs. Roadway lengths as follows Shadylawn = 1450.4 l.f., Claymore = 516.5 l.f., Angelnook = 201.5 l.f. Right of way width = 50 feet. Sidewalk is badly deteriorated and uneven. See additional support information for pavement management system roadway deficiencies.

d: DESIGN SERVICE CAPACITY:

**IMPORTANT:** Detail shall be included regarding current service capacity vs proposed service level. If road or bridge project, include ADT. If water or wastewater project, include both current residential rates based on monthly usage of 7,756 gallon per household. Attach current rate ordinance.

Current service capacity design is adequate for existing use. Highest ADT = 230 vehicles per hour x 1.2 or 276.

2.3 USEFUL LIFE / COST ESTIMATE: Project Useful Life: 20 Years.

Attach Registered Professional Engineer's statement, with original seal and signature certifying the project's useful life indicated above and estimated cost.

### 3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT	\$734,040.00	100%
State Funds Requested for Repair and Replacement	\$660,636.00	90%
TOTAL PORTION OF PROJECT NEW/EXPANSION	\$ 0.00	0%
State Funds Requested for New and Expansion	\$ 0.00	0%

### 4.0 PROJECT SCHEDULE:\*

	BEGIN DATE	END DATE
4.1 Engineering/Design:	01 / 01 / 97	09 / 01 / 97
4.2 Bid Advertisement:	09 / 02 / 97	11 / 01 / 97
4.3 Construction:	11 / 02 / 97	09 / 01 / 98

\* Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be approved in writing by the Commission once the Project Agreement has been executed. Dates should assume project agreement approval/release on July 1st. of the Program Year applied for.

### 5.0 APPLICANT INFORMATION:

#### 5.1 CHIEF EXECUTIVE

OFFICER NICHOLAS J. LASCALEA  
TITLE TOWNSHIP TRUSTEE  
STREET 943 NEEB ROAD  
  
CITY/ZIP CINCINNATI, OHIO 45233  
PHONE (513 ) 922 - 3111  
FAX (513 ) 922 - 9315

#### 5.2 CHIEF FINANCIAL

OFFICER KENNETH J. RYAN  
TITLE TOWNSHIP CLERK  
STREET 934 NEEB ROAD  
  
CITY/ZIP CINCINNATI, OHIO 45233  
PHONE (513 ) 922 - 3111  
FAX (513 ) 922 - 9315

#### 5.3 PROJECT MANAGER

TITLE ROBERT W. BASS  
STREET HIGHWAY SUPERINTENDENT  
665 NEEB ROAD  
  
CITY/ZIP CINCINNATI, OHIO 45233  
PHONE (513 ) 922 - 8609  
FAX (513 ) 922 - 8635

## 6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Check each section below, confirming that all required information is included in this application.

X A certified copy of the legislation by the governing body of the applicant authorizing a designated official to submit this application and execute contracts. (Attach)

X A summary from the applicant's Chief Financial Officer listing all local share funds budgeted for the project and the date they are anticipated to be available. (Attach)

X A registered professional engineer's estimate of projects useful life and cost estimate, as required in 164-1-14 and 164-1-16 of the Ohio Administrative Code. Estimates shall contain engineer's original seal and signature. (Attach)

n/a A copy of the cooperation agreement(s) if this project involves more than one subdivision or district. (Attach)

X Capital Improvements Report: (Required by 164 O.R.C. on standard form)

X A: Attached.

B: Report/Update Filed with the Commission within the last twelve months.

n/a Floodplain Management Permit: Required if project is in 100 year floodplain. See Instructions.

n/a Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), and other information to assist your district committee in ranking your project.

## 7.0 APPLICANT CERTIFICATION:

The undersigned certifies that: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission; (2) that to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) that all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving minority business utilization, Buy Ohio, and prevailing wages.

**IMPORTANT:** Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement on this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding of the project.

Nicholas J. Lascales-CEO

Certifying Representative (Type or Print Name and Title)

Nicholas J. Lascales 8/28/11

Signature/Date Signed)



ESTIMATED COST  
SPREADSHEETSCIP/  
DELHI TOWNSHIP  
RECONSTRUCTION

ITEM	404	452	604	604	604	605	608	608	609	609	614	619
	A.C. CON.	P.P.C.	C.B.	M.H.	UNDER	SIDE	CURB	CURB	TYPE 6	CURB &	MAINT.	FIELD
	SUR. RD.	CON. PMT.	CONST.	CONST.	DRAIN	WALK	RAMP	CURB	GUTTER	TRAFFIC	OFFICE	
MEASURE	C. Y.	S. Y.	EA.	EA.	L.F.	S.F.	EA.	L.F.	L.F.	L.S.	L.S.	L.S.
COST PER	\$80.00	\$35.00	\$1,500.00	\$1,600.00	\$7.50	\$4.00	\$100.00	\$15.00	\$12.00	\$10,000.00	\$4,000.00	
NO.	STREET											
1	Shady/lawn											
	Subtotal	155.00	660.00	5.00	6.00	2,950.00	8,260.00	6.00	360.00	2,590.00	0.00	0.00
		\$12,400.00	\$23,100.00	\$7,500.00	\$9,600.00	\$22,125.00	\$33,040.00	\$600.00	\$5,400.00	\$31,080.00	\$0.00	\$0.00
2	Claymore											
	Subtotal	60.00	200.00	2.00	3.00	1,060.00	2,960.00	0.00	0.00	1,060.00	0.00	0.00
		\$4,800.00	\$7,000.00	\$3,000.00	\$4,800.00	\$7,950.00	\$11,840.00	\$0.00	\$0.00	\$12,720.00	\$0.00	\$0.00
3	Angelhook											
	Subtotal	24.00	75.00	1.00	1.00	430.00	1,195.00	0.00	0.00	430.00	0.00	0.00
		\$1,920.00	\$2,625.00	\$1,500.00	\$1,600.00	\$3,225.00	\$4,780.00	\$0.00	\$0.00	\$5,160.00	\$0.00	\$0.00
	Lump Sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
	Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,000.00	\$4,000.00
	Contingencies	25.00	20.00	0.00	0.00	100.00	800.00	0.00	25.00	100.00	0.00	0.00
	Subtotal	\$2,000.00	\$700.00	\$0.00	\$0.00	\$750.00	\$3,200.00	\$0.00	\$375.00	\$1,200.00	\$0.00	\$0.00
	Total Quantity	264.00	955.00	8.00	10.00	4,540.00	13,215.00	6.00	385.00	4,180.00	1.00	1.00
	Total Price	\$21,120.00	\$33,425.00	\$12,000.00	\$16,000.00	\$34,050.00	\$52,860.00	\$600.00	\$5,775.00	\$50,160.00	\$10,000.00	\$4,000.00

ESTIMATED COST  
SPREADSHEET

SCIP/  
DELHI TOWNSHIP  
RECONSTRUCTION

ITEM	623 LAYOUT STAKES	1100 W.W. ITEMS	SPL FINISH GRADE	SPL TENSAR	623 GEOTEX FABRIC	TOTAL COST \$
MEASURE	L. S.	L. S.	L. S.	S. Y.	S. Y.	
COST PER	\$8,000.00	\$200,000.00	\$13,000.00	\$3.00	\$2.00	
NO. STREET						
1 Shady lawn Subtotal	0.00 \$0.00	0.00 \$0.00	0.00 \$0.00	3,710.00 \$11,130.00	3,710.00 \$7,420.00	\$296,345.00
2 Claymore Subtotal	0.00 \$0.00	0.00 \$0.00	0.00 \$0.00	1,435.00 \$4,305.00	1,435.00 \$2,870.00	\$111,475.00
3 Angelnook Subtotal	0.00 \$0.00	0.00 \$0.00	0.00 \$0.00	560.00 \$1,680.00	560.00 \$1,120.00	\$44,885.00
Lump Sum Subtotal	1.00 \$8,000.00	1.00 \$200,000.00	1.00 \$13,000.00	0.00 \$0.00	0.00 \$0.00	\$242,800.00
Contingencies Subtotal	0.00 \$0.00	0.00 \$0.00	0.00 \$0.00	100.00 \$300.00	100.00 \$200.00	\$38,535.00
Total Quantity Total Price	1.00 \$8,000.00	1.00 \$200,000.00	1.00 \$13,000.00	5,805.00 \$17,415.00	5,805.00 \$11,610.00	\$734,040.00 \$734,040.00

This is to certify that upon the satisfactory completion of this work,  
the useful life of the streets on this project will be at least 20 years.

Signed: William W. Brayshaw P.E., P.S.

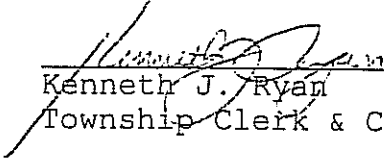


# DELHI TOWNSHIP, OHIO



## STATUS OF FUNDS

This is to certify that Delhi Townships portion of the funding for this project will become available on January 1, 1997.

  
Kenneth J. Ryan

Township Clerk & Chief Financial Officer

# DELHI TOWNSHIP, OHIO



## ENABLING LEGISLATION MOTION

Trustee Kruse moved and Trustee LaScalea seconded to apply to the District 2 Integrating Committee for the below mentioned projects and to appoint Nicholas J. LaScalea as Chief Executive Officer, Kenneth J. Ryan as Chief Financial Officer and Robert W. Bass as Project Manager.

Projects being requested for Issue 2 Infrastructure Bond Funding for Program Year 97

1.) Fehrwood Subdivision Reconstruction	\$ 734,040.00
2.) Robben Lane Reconstruction	\$ 519,291.00
<b>Grand Total</b>	<b>\$ 1,253,331.00</b>

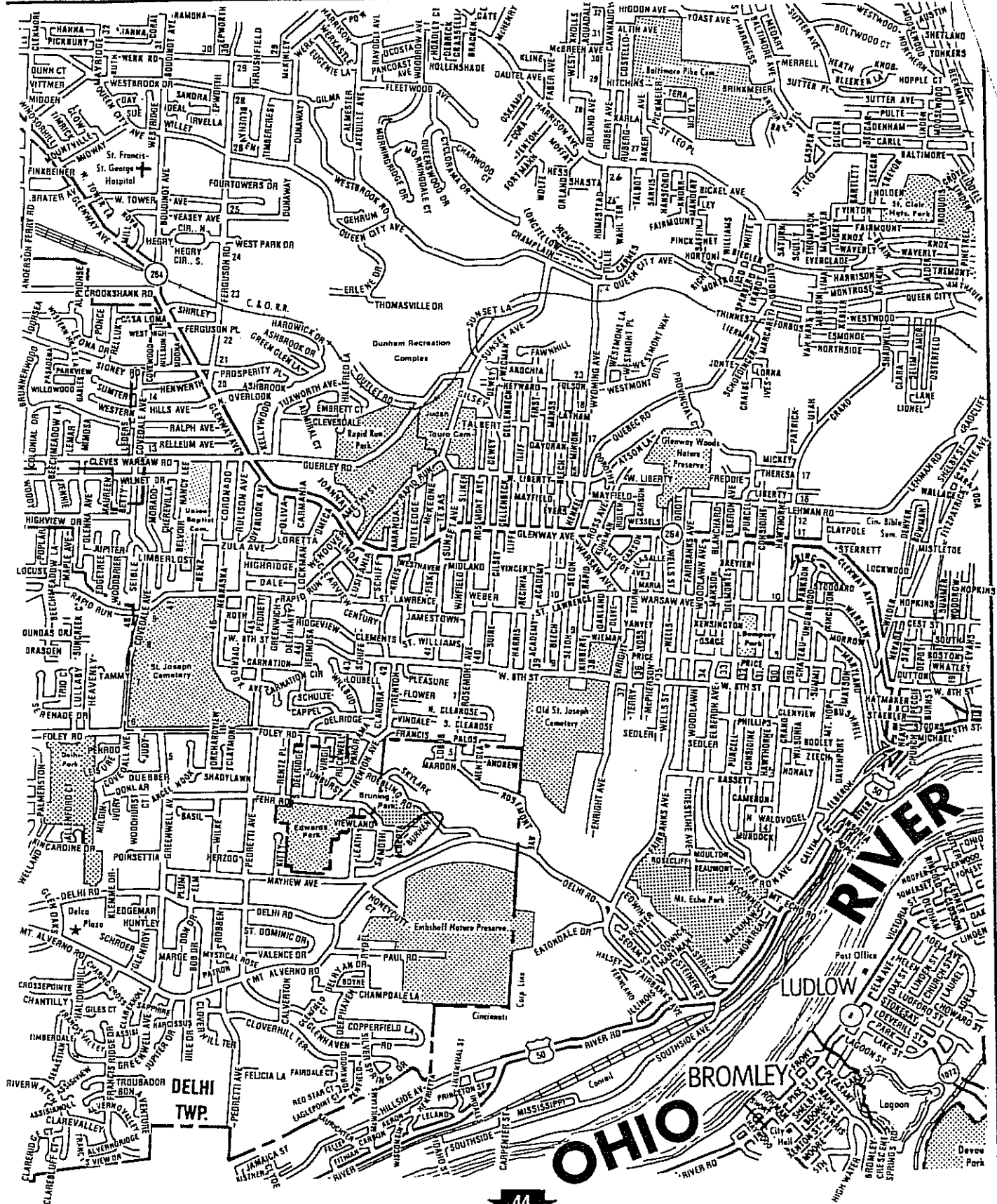
Trustees Espelage, Kruse and LaScalea voted aye at roll call.  
**Motion Carried.**

### Certificate of Clerk

It is hereby certified that the foregoing is a true and correct copy of a motion passed by the Delhi Township Board of Trustees in session on August 28, 1996.

In witness whereof I have hereunto set my hand this 28th day of August, 1996.

-----  
A handwritten signature of Kenneth J. Ryan in cursive script.  
-----  
Kenneth J. Ryan, Township Clerk



R

S

T

U

V

PROJECT

CLAYTON  
SHAW LANE  
AUG 12 1911

# DELHI TOWNSHIP, OHIO



## CERTIFICATION OF TRAFFIC VOLUMN

This statement is to certify that traffic volumns noted for this project are true and correct to the best of my knowledge.

Signed:

*Nicholas J. LaScalea*

Nicholas J. LaScalea,  
Delhi Township C.E.O

## ADDITIONAL SUPPORT INFORMATION

For Program Year 1997 (July 1, 1997 through June 30, 1998), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items may be required by the Support Staff if information does not appear to be accurate.

1) What is the condition of the existing infrastructure to be replaced, repaired, or expanded? For bridges, submit a copy of the current State form BR-86.

Closed \_\_\_\_\_ Poor   X    
Fair \_\_\_\_\_ Good \_\_\_\_\_

Give a brief statement of the nature of the deficiency of the present facility such as: inadequate load capacity (bridge); surface type and width; number of lanes; structural condition; substandard design elements such as berm width, grades, curves, sight distances, drainage structures, or inadequate service capacity. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded.

Delhi Township's Independent Pavement Management System shows moderate to high severity deterioration in the categories of bond loss, patch deterioration, transverse cracking, reflective cracking, settlement, shattered slabs, potholes, pumping, raveling, spalling, joint seal damage, D-cracking, and faulting with low severity deterioration in the category of depressions and swells. Surface quality is fair to poor, joint quality is poor to very poor, support and structural quality is failed. Overall pavements are failed on all sections except for Shadylawn from Orchardview to the North end which is very poor. Drainage structure designed to handle rear yard surface drainage is failed.

2) If State Capital Improvement Program funds are awarded, how soon (in weeks or months) after receiving the Project Agreement from OPWC (tentatively set for July 1, 1997) would the project be under contract? The Support Staff will be reviewing status reports of previous projects to help judge the accuracy of a particular jurisdiction's anticipated project schedule.

6 weeks/months (Circle one)

Are preliminary plans or engineering completed? Yes No

Are detailed construction plans completed? Yes No

Are all right-of-way and easements acquired? Yes No N/A

\*Please answer the following if applicable:

No. of parcels needed for project: \_\_\_\_\_ Of these how many are Takes \_\_\_\_\_, Temporary \_\_\_\_\_, Permanent \_\_\_\_\_

On a separate sheet, explain the status of the ROW acquisition process for any parcels not yet acquired.

Are all utility coordination's completed? Yes No N/A

Give an estimate of time, in weeks or months, to complete any item above not yet completed. 6 weeks/months

3) How will the proposed project impact the general health, safety and welfare of the service area? (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, health hazards, user benefits, and commerce.) Please be specific and provide documentation if necessary to substantiate the data.

By re-establishing proper line and grade the street flooding which occurs on Claymore will be eliminated and by correcting all settlements and faulting on-street pooling of water will be eliminated. By increasing the pipe size and installing the proper inlet in the rear yards of 4702, 4708, and 4716 Shadylawn the rear yard flooding, which has caused 3.5 feet of water in these basements (May 1996), will be eliminated.

- 4) What type of funds are to be utilized for the local share for this project?

Federal \_\_\_\_\_ ODOT \_\_\_\_\_ Local   X    
MRF \_\_\_\_\_ OWDA \_\_\_\_\_ CD \_\_\_\_\_  
Other \_\_\_\_\_

Note: If MRF funds are being used for the local share, the MRF application must have been filed by August 1, 1996 for this project with the Hamilton County Engineer's Office.

The minimum amount of matching funds for grant projects (local share) must be at least 10% of the TOTAL CONSTRUCTION COST. What percentage of matching funds are being committed to this project?

  10   %

- 5) Has any formal action by a federal, state, or local government agency resulted in a complete or partial ban of the use or expansion of use for the involved infrastructure? (Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of building permits.) A copy of the legislation must be submitted with the application. THE BAN MUST HAVE AN ENGINEERING JUSTIFICATION TO BE VALID.

Complete Ban \_\_\_\_\_ Partial Ban \_\_\_\_\_ No Ban   X  

Will the ban be removed after the project is completed?

Yes \_\_\_\_\_ No \_\_\_\_\_

- 6) What is the total number of existing users that will benefit as a result of the proposed project?

230 users x 1.2 = 276 ADT

For roads and bridges, multiply current documented Average Daily Traffic by 1.20. For public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4.





Road Inventory Form

SECTION	Section Number: 348.00	State Route: 83	Inventory Date: 02/27/199
	Name: SHADYLAWN TERRACE		Completed By: DAS
	From: END (NORTH)		Jurisdiction: Township
	To: ORCHARDVIEW LANE - 813.4		Length (ft): 813.4

GENERAL	Direction to: SouthEa	Subdivision: FEHRWOOD	Classification: Local
	R.O.W Width (ft): 50.0		Travel Lanes: 2
	Type Of Median: None		Parking Lanes: 1

PAVEMENT	Pavement Type: Composite	Width (ft): 23.0	No. of Layers: 3	
	<u>Pavement Layer</u>	<u>Type</u>	<u>Thickness</u>	<u>Date Constructed</u>
	- Subgrade	Subgrade		09/01/199
	- Basecourse	Concrete	6.5	09/01/199
	- Surface	Asphalt	2.5	09/01/199
	Area(yd²): 2078.69	Features:		

SHOULDER	<u>Type</u>	<u>Width (in)</u>	CURB	<u>Type</u>	<u>Length (ft)</u>
	Left Earthwork	13.50		Left Rolled Concrete	813.4
	Right Earthwork	13.50		Right Rolled Concrete	813.4

TRAFFIC	Average Daily Traffic (ADT): 230	STRUCTURE	No. of Culverts:	No. of Driveways: 31	
	% Trucks: 1.0		Bus Route: No	No. of Bridges:	No. of RR-Xings:
	Study: Estimate		Year: 1990	No. of Inlets: 6	No. of Manholes:
	No. of Traffic Signs:				

Remarks:

Condition Rating Form

Section Number: 348.00	State Route: 83	Survey Date: 11/15/1994
Name: SHADYLAWN TERRACE	Jurisdiction: Township	
From: END (NORTH)	Length(ft): 813.40	
To: ORCHARDVIEW LANE - 813.4	Area(yd²): 2078.69	
Ride Quality Index(RQI):	% Curb Deterioration: 0	
Maintenance Index(MI):	Maintenance Factor(MF): 1.0	
Classification: Local	Class Factor(FC): 1.0	
Average Daily Traffic(ADT): 230	Traffic Factor(TF): 1	
Transit/Bus Route: No	Transit Factor(TR): 1.0	
Pavement Type: Composite	Unit Cost: \$ 15.50	

Distress Type	Category	Severity	Extent	Deduction		PCI	Condition
>> Ravelling	1	1	4	2.00	Surface:	86.00	Fair
>> Bond Loss	1	2	2	9.00	Joint	68.65	Poor
>> Patch Deterioration	1	2	1	3.00	Support:	71.10	Failed
>> Corrugation or Slippage Cracking	1				Structure:	67.29	Failed
>> Transverse Cracking	2	2	1	7.35	Final:	25.75	Very Poor
>> Longitudinal Cracking	2						
>> Reflective Cracking	2	2	4	24.00	Priority Index(PI):	4.66	
>> Pumping	2	1	1	3.00	Strategy: D		
>> Settlement	2	2	1	5.40	Cost: \$ 32219.70		
>> Shattered/Swell Slab	2	2	4	17.50	Maintenance		
>> Potholes	1	2	1	3.00	Action(s): Crack Sealing		
					Overlay		

Cracks: Not Sealed

Rated By: DAS Consult, Inc. - RAJ

Legend

RQI:	1 = Worst	5 = Best	
MI/MF:	0 = Least Needed	5 = Most Needed	MF = 1 + (MI/10)
Severity:	0 = None	1 = Low	2 = Moderate
			3 = High
Category:	1 = Surface Related	2 = Structural Related	
Extent:	0 = None	1 = 1-5%	2 = 6-25%
			3 = 26-50%
			4 = 51-100%
Strategy/	A1= No Maintenance/\$ 0.00		A = Routine Maintenance/\$ 1.18
Unit Cost:	B = Periodic Maintenance/\$ 0.43		C = Deferred Action/\$ 0.15
	D = Rehabilitation/\$ 15.50		E = Reconstruction/\$ 53.00

PCI = 100 - Sum(deduct values)      PCI = 1 if zero

PI = 1/PCI \* TR \* TF \* FC \* MF \* 100

Cost = Unit Cost \* Area

Road Inventory Form

SECTION	Section Number: 349.00	State Route: 83	Inventory Date: 02/27/199
	Name: SHADYLAWN TERRACE		Completed By: DAS
	From: ORCHARDVIEW LANE - 813.4		Jurisdiction: Township
	To: END (EAST) - 1450.4		Length (ft): 637.0

GENERAL	Direction to: East	Subdivision: FEHRWOOD	Classification: Local
	R.O.W Width (ft): 50.0		Travel Lanes: 2
	Type Of Median: None		Parking Lanes: 1

PAVEMENT	Pavement Type: Composite	Width (ft): 23.0	No. of Layers: 3	
	<u>Pavement Layer</u>	<u>Type</u>	<u>Thickness</u>	<u>Date Constructed</u>
	- Subgrade	Subgrade		09/01/199
	- Basecourse	Concrete	6.5	09/01/199
	- Surface	Asphalt	2.5	09/01/199
	Area(yd²): 1627.89	Features:		

SHOULDER	<u>Type</u>	<u>Width (in)</u>	CURB	<u>Type</u>	<u>Length (ft)</u>
	Left Earthwork	13.00		Left Rolled Concrete	637.0
	Right Earthwork	13.00		Right Rolled Concrete	637.0

TRAFFIC	Average Daily Traffic (ADT): 110	STRUCTURE	No. of Culverts:	No. of Driveways: 22	
	% Trucks: 1.0		Bus Route: No	No. of Bridges:	No. of RR-Xings:
	Study: Estimate		Year: 1990	No. of Inlets: 4	No. of Manholes:
	No. of Traffic Signs:				

Remarks:

Condition Rating Form

Section Number: 349.00	State Route: 83	Survey Date: 11/15/1994
Name: SHADYLAWN TERRACE	Jurisdiction: Township	
From: ORCHARDVIEW LANE - 813.4	Length(ft): 637.00	
To: END (EAST) - 1450.4	Area(yd²): 1627.89	
Ride Quality Index(RQI):	% Curb Deterioration: 50	
Maintenance Index(MI):	Maintenance Factor(MF): 1.0	
Classification: Local	Class Factor(FC): 1.0	
Average Daily Traffic(ADT): 110	Traffic Factor(TF): 1	
Transit/Bus Route: No	Transit Factor(TR): 1.0	
Pavement Type: Composite	Unit Cost: \$ 53.00	

Distress Type	Category	Severity	Extent	Deduction		PCI	Condition
>> Ravelling	1	2	4	10.00	Surface:	81.60	Poor
>> Bond Loss	1	2	1	5.40	Joint	68.65	Poor
>> Patch Deterioration	1	2	1	3.00	Support:	74.65	Failed
Corrugation or Slippage Cracking	1				Structure:	69.31	Failed
>> Transverse Cracking	2	2	1	7.35	Final:	24.90	Failed
Longitudinal Cracking	2						
>> Reflective Cracking	2	2	4	24.00	Priority Index(PI):	4.82	
>> Pumping	2	3	2	10.00	Strategy:	E	
>> Settlement	2	1	1	3.60	Cost:	\$ 86278.17	
>> Shattered/Swell Slab	2	2	2	8.75	Maintenance		
>> Potholes	1	2	1	3.00	Action(s):	Reconstruction	

Cracks: Not Sealed

Rated By: DAS Consult, Inc. - RAJ

Legend

RQI:	1 = Worst	5 = Best	
MI/MF:	0 = Least Needed	5 = Most Needed	MF = 1 + (MI/10)
Severity:	0 = None	1 = Low	2 = Moderate
			3 = High
Category:	1 = Surface Related	2 = Structural Related	
Extent:	0 = None	1 = 1-5%	2 = 6-25%
			3 = 26-50%
			4 = 51-100%
Strategy/	A1= No Maintenance/\$ 0.00		A = Routine Maintenance/\$ 1.18
Unit Cost:	B = Periodic Maintenance/\$ 0.43		C = Deferred Action/\$ 0.15
	D = Rehabilitation/\$ 15.50		E = Reconstruction/\$ 53.00

PCI = 100 - Sum(deduct values)      PCI = 1 if zero

PI = 1/PCI \* TR \* TF \* FC \* MF \* 100

Cost = Unit Cost \* Area

Road Inventory Form

SECTION	Section Number: 350.00	State Route: 85	Inventory Date: 02/24/199
	Name: CLAYMORE TERRACE		Completed By: DAS
	From: SHADYLAWN TERRACE		Jurisdiction: Township
	To: END - 516.5		Length (ft): 516.5

GENERAL	Direction to: North	Subdivision: FERNWOOD	Classification: Local
	R.O.W Width (ft): 50.0		Travel Lanes: 2
	Type Of Median: None		Parking Lanes: 1

PAVEMENT	Pavement Type: Composite	Width (ft): 25.0	No. of Layers: 3	
	<u>Pavement Layer</u>	<u>Type</u>	<u>Thickness</u>	<u>Date Constructed</u>
	- Subgrade	Subgrade		09/01/199
	- Basecourse	Concrete	6.5	09/01/199
	- Surface	Asphalt	1.5	09/01/199
	Area(yd²): 1434.72	Features:		

SHOULDER	<u>Type</u>	<u>Width (in)</u>	CURB	<u>Type</u>	<u>Length (ft)</u>
	Left Earthwork	12.50		Left Rolled Concrete	516.5
	Right Earthwork	12.50		Right Rolled Concrete	516.5

TRAFFIC	Average Daily Traffic (ADT): 42	STRUCTURE	No. of Culverts:	No. of Driveways: 16	
	% Trucks: 1.0		Bus Route: No	No. of Bridges:	No. of RR-Xings:
	Study: Estimate		Year: 1990	No. of Inlets: 4	No. of Manholes:
	No. of Traffic Signs:				

Remarks:

Condition Rating Form

Section Number: 350.00 State Route: 85 Survey Date: 11/15/1994

Name: CLAYMORE TERRACE Jurisdiction: Township

From: SHADYLAWN TERRACE Length(ft): 516.50

To: END - 516.5 Area(yd²): 1434.72

Ride Quality Index(RQI): % Curb Deterioration: 50

Maintenance Index(MI): Maintenance Factor(MF): 1.0

Classification: Local Class Factor(FC): 1.0

Average Daily Traffic(ADT): 42 Traffic Factor(TF): 1

Transit/Bus Route: No Transit Factor(TR): 1.0

Pavement Type: Composite Unit Cost: \$ 53.00

Distress Type	Category	Severity	Extent	Deduction		PCI	Condition
>> Ravelling	1	2	4	10.00	Surface:	78.00	Poor
>> Bond Loss	1	2	2	9.00	Joint	68.65	Poor
>> Patch Deterioration	1	2	1	3.00	Support:	72.40	Failed
Corrugation or Slippage Cracking	1				Structure:	66.31	Failed
>> Transverse Cracking	2	2	1	7.35	Final:	19.05	Failed
Longitudinal Cracking	2						
>> Reflective Cracking	2	2	4	24.00	Priority Index(PI):	5.25	
>> Pumping	2	3	2	10.00	Strategy:	E	
>> Settlement	2	1	1	3.60	Cost:	\$ 76040.16	
>> Shattered/Swell Slab	2	2	3	14.00	Maintenance		
Potholes	1				Action(s):	Reconstruction	

Cracks: Not Sealed

Rated By: DAS Consult, Inc. - RAJ

Legend

RQI: 1 = Worst 5 = Best  
MI/MF: 0 = Least Needed 5 = Most Needed MF = 1 + (MI/10)  
Severity: 0 = None 1 = Low 2 = Moderate 3 = High  
Category: 1 = Surface Related 2 = Structural Related  
Extent: 0 = None 1 = 1-5% 2 = 6-25% 3 = 26-50% 4 = 51-100%  
Strategy/ A1 = No Maintenance/\$ 0.00 A = Routine Maintenance/\$ 1.18  
Unit Cost: B = Periodic Maintenance/\$ 0.43 C = Deferred Action/\$ 0.15  
D = Rehabilitation/\$ 15.50 E = Reconstruction/\$ 53.00

PCI = 100 - Sum(deduct values) PCI = 1 if zero

PI = 1/PCI \* TR \* TF \* FC \* MF \* 100

Cost = Unit Cost \* Area

Road Inventory Form

SECTION	Section Number: 351.00	State Route: 84	Inventory Date: 02/23/199
	Name: ANGELNOOK DRIVE		Completed By: DAS
	From: SHADYLAWN TERRACE		Jurisdiction: Township
	To: END - 201.5		Length (ft): 201.5

GENERAL	Direction to: SouthWe	Subdivision: FERNWOOD	Classification: Local
	R.O.W Width (ft): 50.0		Travel Lanes: 1
	Type Of Median: None		Parking Lanes: 1

PAVE- MENT	Pavement Type: Rigid	Width (ft): 25.0	No. of Layers: 2	
	<u>Pavement Layer</u>	<u>Type</u>	<u>Thickness</u>	<u>Date Constructed</u>
	Subgrade	Subgrade		09/01/199
	Surface	Concrete	7.0	09/01/199
	Area(yd²): 559.72	Features:		

SHOULDER	<u>Type</u>	<u>Width (in)</u>	CURB	<u>Type</u>	<u>Length (ft)</u>
	Left Earthwork	12.50		Left Rolled Concrete	201.5
	Right Earthwork	12.50		Right Rolled Concrete	201.5

TRAFFIC	Average Daily Traffic (ADT): 16	STRUCTURE	No. of Culverts:	No. of Driveways: 6	
	% Trucks: 1.0		Bus Route: No	No. of Bridges:	No. of RR-Xings:
	Study: Estimate		Year: 1990	No. of Inlets: 2	No. of Manholes:
	No. of Traffic Signs:				

Remarks:

Condition Rating Form

Section Number: 351.00 State Route: 84 Survey Date: 11/15/1994

Name: ANGELNOOK DRIVE Jurisdiction: Township

From: SHADYLAWN TERRACE Length(ft): 201.50

To: END - 201.5 Area(yd²): 559.72

Ride Quality Index(RQI): % Curb Deterioration: 0

Maintenance Index(MI): Maintenance Factor(MF): 1.0

Classification: Local Class Factor(FC): 1.0

Average Daily Traffic(ADT): 16 Traffic Factor(TF): 1

Transit/Bus Route: No Transit Factor(TR): 1.0

Pavement Type: Rigid Unit Cost: \$ 53.00

Distress Type	Category	Severity	Extent	Deduction		PCI	Condition
Scaling or Map Cracking	1				Surface:	85.00	Fair
>> Patch Deterioration	1	3	2	15.00	Joint	64.20	Very Poor
Popouts	1				Support:	68.85	Failed
>> Spalling	1	3	3	9.00	Structure:	70.61	Very Poor
>> Joint Sealant Damage	1	3	4	10.00	Final:	18.05	Failed
Transverse Cracking	2						
Longitudinal Cracking	2						
>> Durability 'D' Cracking	2	2	3	16.80	Priority Index(PI):	5.54	
>> Pumping	2	2	2	8.75	Strategy:	E	
>> Faulting	2	3	3	20.00	Cost:	\$ 29665.16	
>> Settlement (Depression & Swell)	1	1	1	2.40	Maintenance		
Blow_ups	2				Action(s):	Reconstruction	

Cracks: Not Sealed

Rated By: DAS Consult, Inc. - RAJ

Legend

RQI: 1 = Worst 5 = Best  
 MI/MF: 0 = Least Needed 5 = Most Needed MF = 1 + (MI/10)  
 Severity: 0 = None 1 = Low 2 = Moderate 3 = High  
 Category: 1 = Surface Related 2 = Structural Related  
 Extent: 0 = None 1 = 1-5% 2 = 6-25% 3 = 26-50% 4 = 51-100%  
 Strategy/ A1= No Maintenance/\$ 0.00 A = Routine Maintenance/\$ 1.18  
 Unit Cost: B = Periodic Maintenance/\$ 0.43 C = Deferred Action/\$ 0.15  
 D = Rehabilitation/\$ 10.50 E = Reconstruction/\$ 53.00

PCI = 100 - Sum(deduct values) PCI = 1 if zero

PI = 1/PCI \* TR \* TF \* FC \* MF \* 100

Cost = Unit Cost \* Area





# DELHI TOWNSHIP, OHIO

## PROJECT LIST

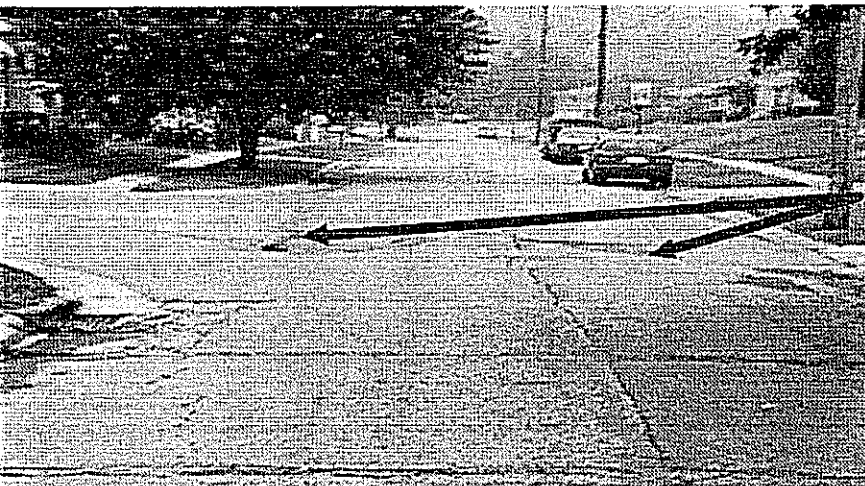
OPWC NO.	PROJECT NAME	BID DATE	STATUS
CB114	Covedale Rd Recon.	05/30/90	Completed on schedule
CB224	Viewland Sub. Recon	07/11/90	Completed on schedule
CB203	Faysel Dr. Recon	02/13/91	Completed on schedule
CB319	Orchardview Ln. Recon.	07/31/91	Completed on schedule
CB333	Elm/Plum Sts. Recon.	07/31/91	Completed on schedule
CBD05	Duebber Sub. Recon.	08/26/92	Completed on schedule
CBD06	Brairhill/Anders Recon.	08/26/92	Completed on schedule
CB619	Halidonhill/Glenoaks	06/30/93	Completed on schedule
CB620	Mapleton/Groton Recon.	06/30/93	Completed on schedule
CB701	Covedale West Recon.	11/08/93	Project 90% completed
CB719	Chantilly Sub. Recon.	11/08/93	Completed on schedule
CBF07	Ihle Dr. Recon.	09/01/94	Completed on schedule
CB817	Victory Dr. Recon	11/30/94	Completed on schedule
CB905	Copperfield Drain. Imps.	06/30/96	Completed on schedule

# Shadylawn Terrace Photos



Failed joints, curb and pavement all due to failed base (see P.M.S. support p.c.i.)

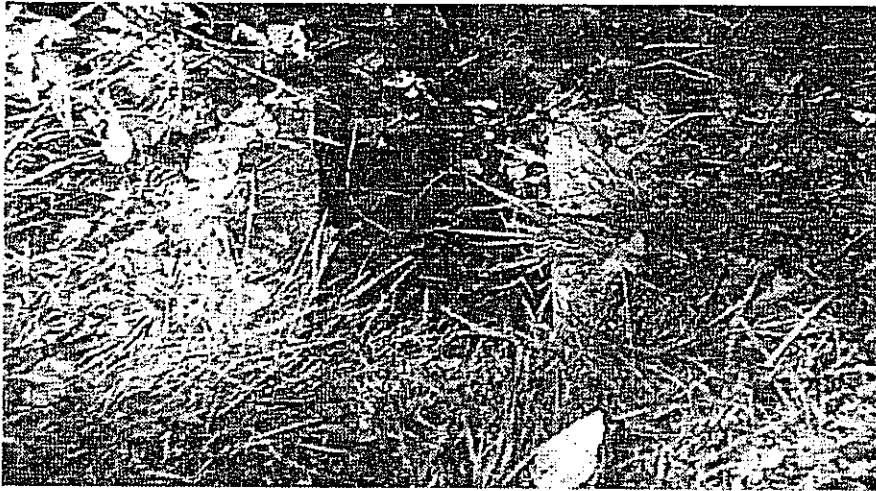
Failed overlay allows water to collect causing severe winter icing problems



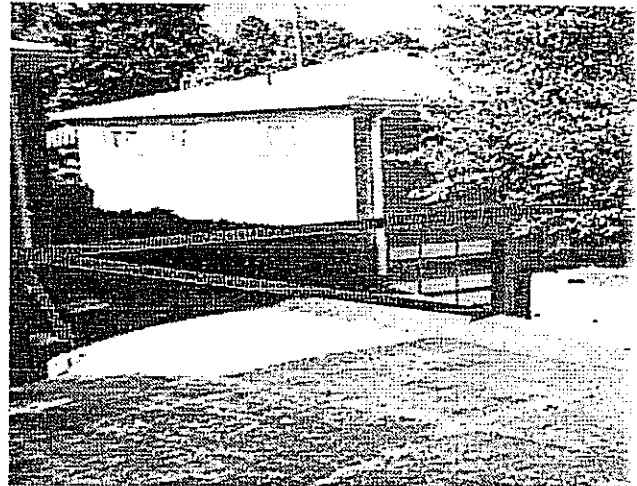
Faulted and dropped slabs allow water/ice to pond in intersection



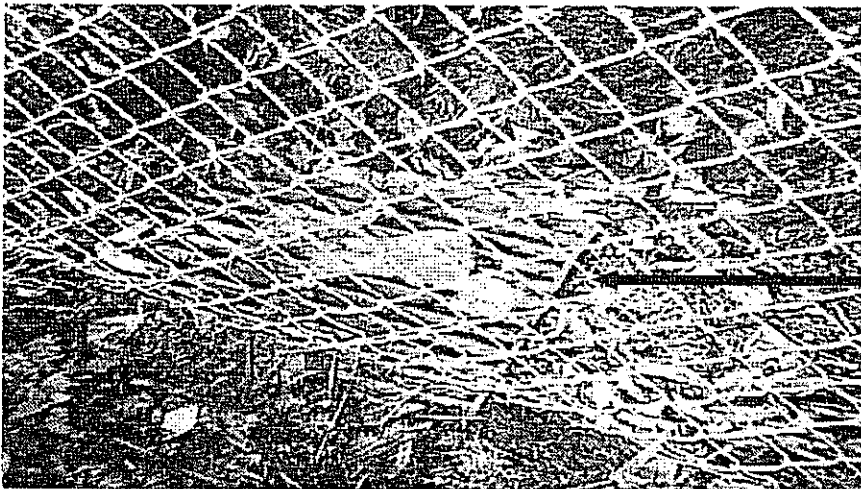
# Shadylawn Drainage Problem



Failed pipe inlet which cause flooding in basements on Sha

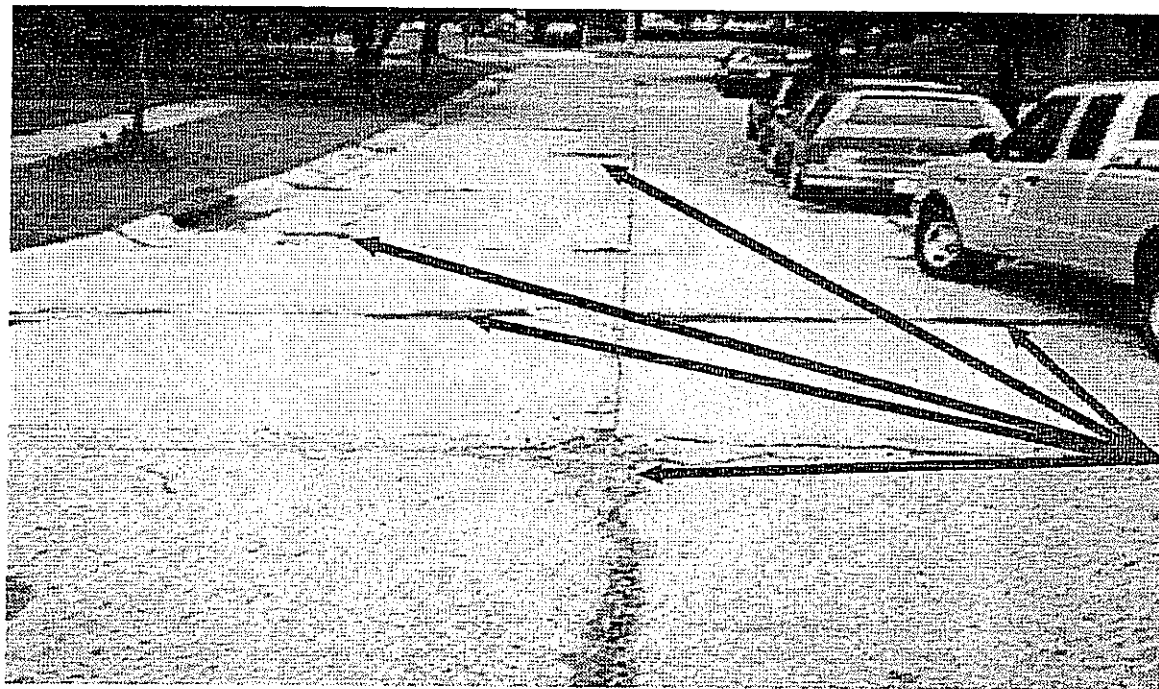


Driveways decline to basement areas where flooding occurred due to inadequate 6" diameter pipe

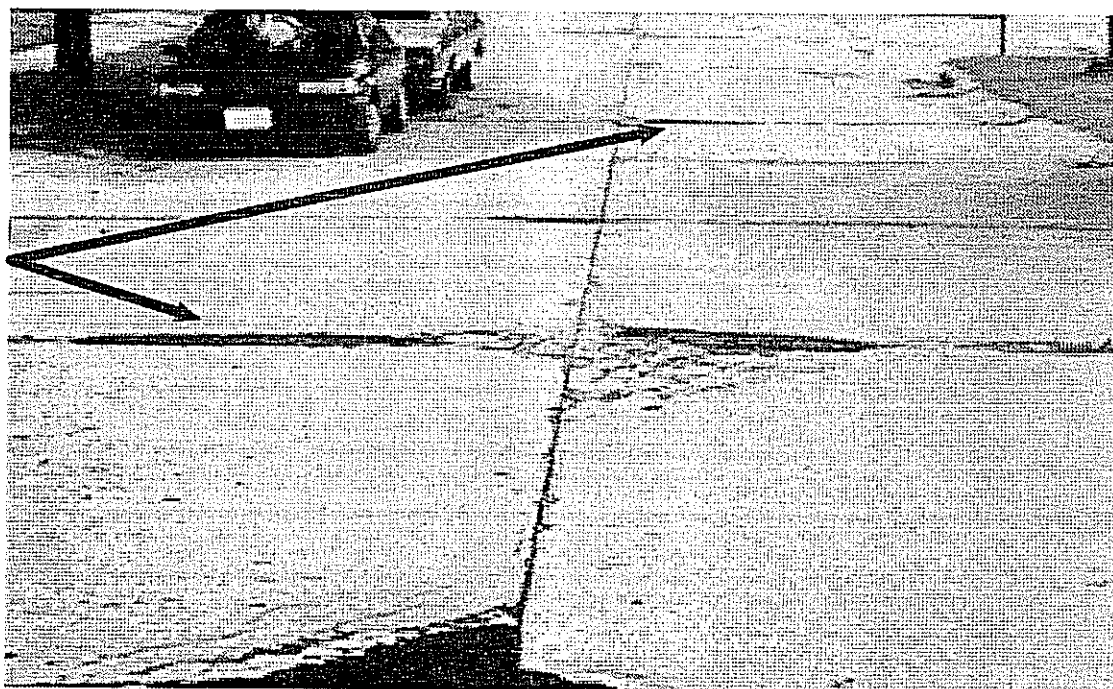


Drainage inlet for 6" diameter

# Angelnook Drive Photos



Joint blowup is prominent

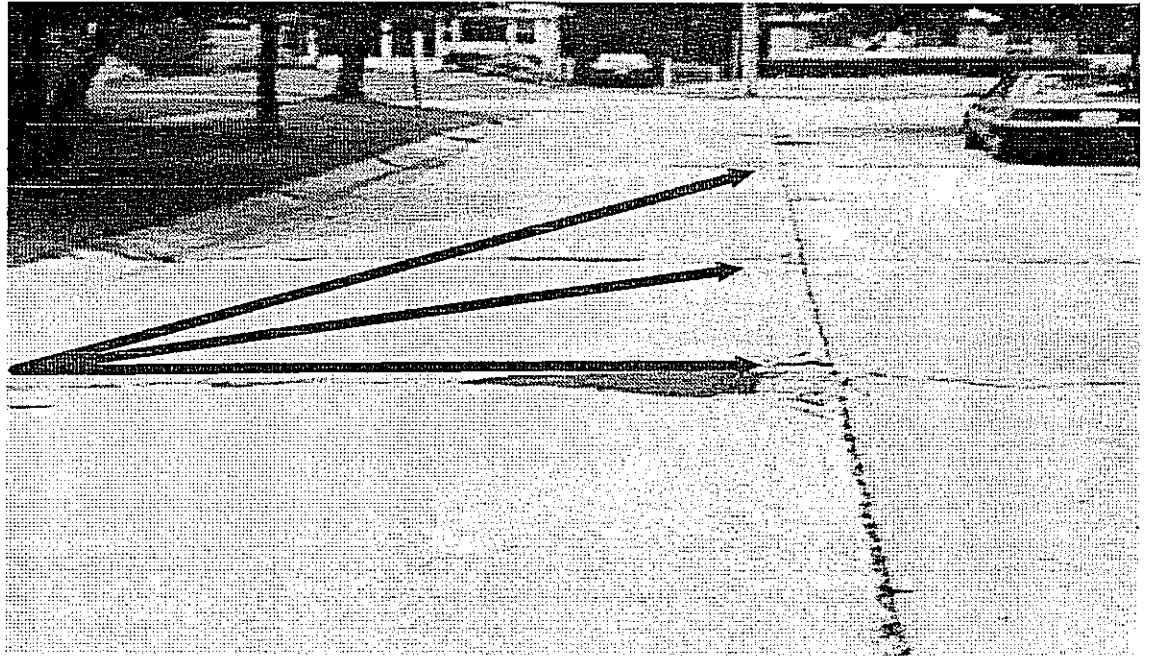


Parking lane & travel lane  
are in equally bad condition

# Angelnook Drive Photos



Typical crazing/block  
cracking

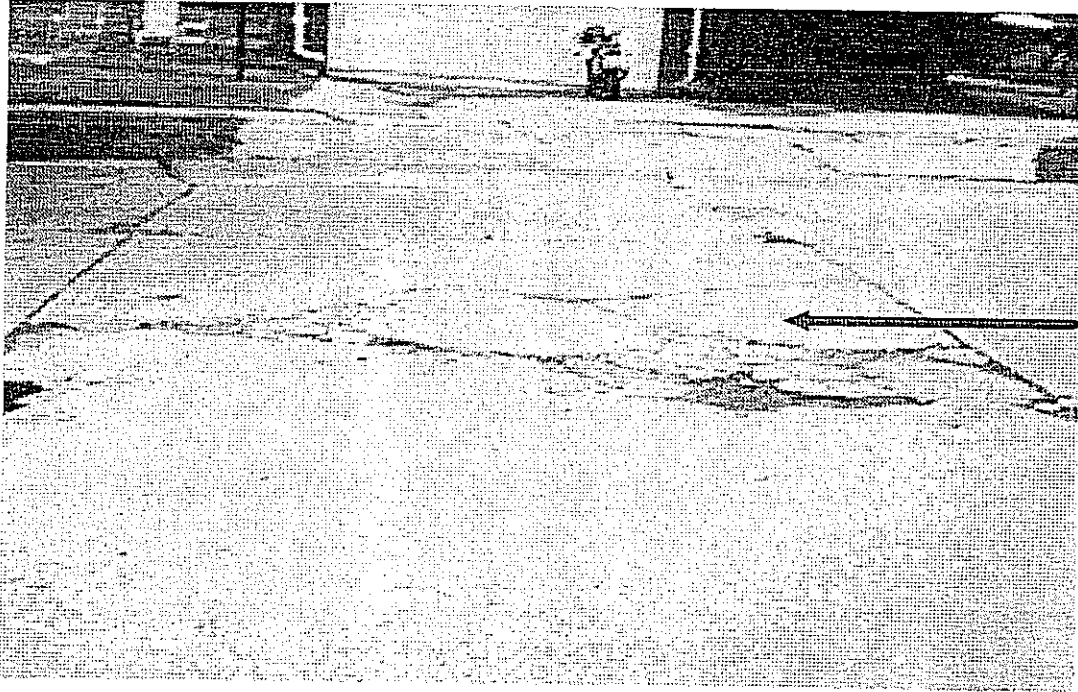


All centerline joints  
are durability

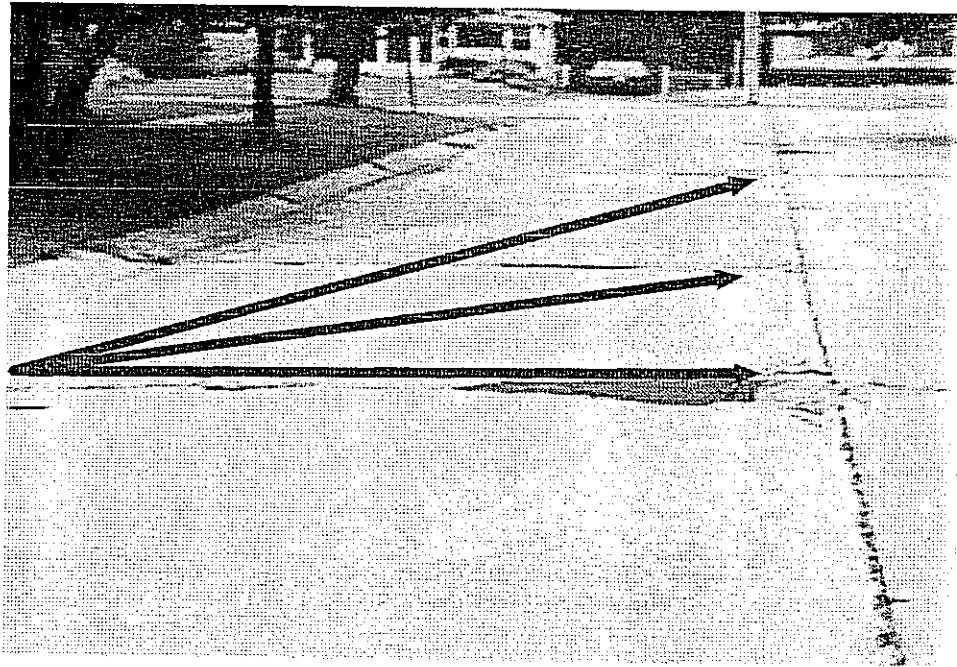
Tv  
er:[illegible]



# Angelnook Drive Photos



Typical crazing  
cracking



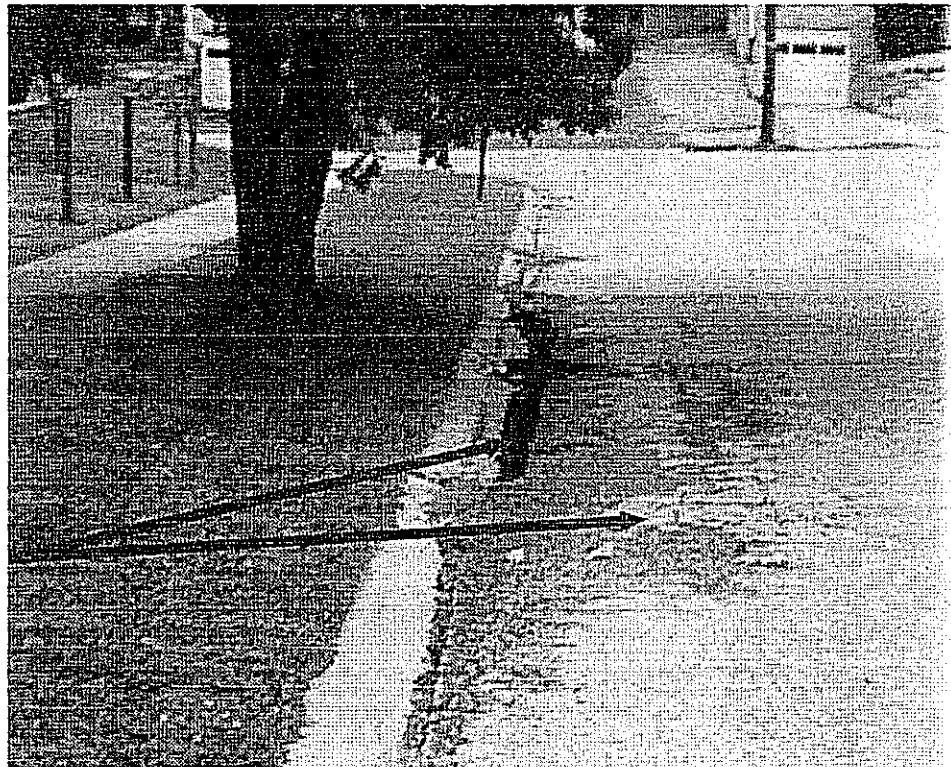
All centerline joints  
are durability



# Claymore Terrace Photos



Overlay is masking severe joint deterioration and block cracking and slab movement



Problems in gutterline due to large voids under pavement

# Claymore Terrace Photos



Pavement thickness is 8 inches - Ruler  
reads 28 & 7/8 inches to subgrade -  
Void equals 20 & 7/8 inches

**SCIP/LTIP PROGRAM**  
**ROUND 11 - PROGRAM YEAR 1997**  
**PROJECT SELECTION CRITERIA**  
**JULY 1, 1997 TO JUNE 30, 1998**

**ADOPTED BY THE INTEGRATING COMMITTEE**  
**May 24, 1996**

JURISDICTION/AGENCY: DELHI TOWNSHIP  
NAME OF PROJECT: FRIARWOOD SUBDIVISION STREET RECONSTRUCTION  
PRELIMINARY SCORE FOR THIS PROJECT: 54  
FINAL SCORE FOR THIS PROJECT: \_\_\_\_\_  
RATING TEAM: 3

- 1) If SCIP/LTIP funds are granted, when would the construction contract be awarded? POINTS 10/10  
10
- 10 Points - Will be under contract by end of 1997 and no delinquent projects in Rounds 8 & 9.
- 5 Points - Will be under contract by March 30, 1998 and/or jurisdiction has had one delinquent project in Rounds 8 & 9.
- 0 Points - Will not be under contract by March 30, 1998 and/or jurisdiction has had more than one delinquent project in Rounds 8 & 9.
- 2) What is the physical condition of the existing infrastructure to be replaced or repaired? 14/20
- 25 Points - Failed 23
- 23 Points - Critical
- 20 Points - Very Poor
- 17 Points - Poor
- 15 Points - Moderately Poor
- 10 Points - Moderately Fair
- 5 Points - Fair Condition
- 0 Points - Good or Better
- Flowchart  
representations*

NOTE: If the infrastructure is in "good" or better condition, it will NOT be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.

3) If the project is built, what will be its effect on the facility's serviceability? Documentation is required. 1/5

- 5 Points - Project design is for future demand.
  - 4 Points - Project design is for partial future demand.
  - 3 Points - Project design is for current demand.
  - 2 Points - Project design is for minimal increase in capacity.
  - 1 Point - Project design is for no increase in capacity.
- 1

4) How important is the project to HEALTH, SAFETY, AND WELFARE of the public and the citizens of the District and/or service area? 2/10  
noticeable  
impact

- 10 Points - Highly significant importance, with substantial impact on all 3 factors. 4
- 8 Points - Considerably significant importance, with substantial impact on 2 factors, or noticeable impact on all 3 factors.
- 6 Points - Moderate importance, with substantial impact on 1 factor or noticeable impact on 2 factors.
- 4 Points - Minimal importance, with noticeable impact on 1 factor
- 2 Points - No measurable impact

5) What is the overall economic health of the jurisdiction? 3/10

- 10 Points
  - 8 Points
  - 6 Points
  - 4 Points
  - 2 Points
- 8

6) What matching funds are being committed to the project, expressed as a percentage of the TOTAL CONSTRUCTION COST? Loan and Credit Enhancement projects automatically receive 5 points, and no match is required. All grant funded projects require a minimum of 10% matching funds. 1/5

- 5 Points - 50% or more
  - 4 Points - 40% to 49.99%
  - 3 Points - 30% to 39.99%
  - 2 Points - 20% to 29.99%
  - 1 Point - 10% to 19.99%
- 1

- 7) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure? *POINTS MAY ONLY BE AWARDED IF THE END RESULT OF THE PROJECT WILL CAUSE THE BAN TO BE LIFTED.* 0/5

5 Points - Complete ban  
3 Points - Partial ban  
0 Points - No ban of any kind

0

- 8) What is the total number of existing daily users that will benefit as a result of the proposed project? Appropriate criteria include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for the roads and bridges, but only when certifiable ridership figures are provided. 1/5

5 Points - 16,000 or more  
4 Points - 12,000 to 15,999  
3 Points - 8,000 to 11,999  
2 Points - 4,000 to 7,999  
1 Point - 3,999 and under

1

- 9) Does the infrastructure have regional impact? Consider originations and destinations of traffic, functional classifications, size of service area, number of jurisdictions served, etc. 1/5

5 Points - Major impact  
4 Points -  
3 Points - Moderate impact  
2 Points -  
1 Point - Minimal or no impact

1

- 10) Has the jurisdiction enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or a dedicated tax for infrastructure and provided certification of which fees have been enacted? 2/2

5 Points - Two of the above  
3 Points - One of the above  
0 Points - None of the above

5

# ADDENDUM TO THE RATING SYSTEM

## DEFINITIONS/CLARIFICATIONS

### Criterion 1 - ABILITY TO PROCEED

The Support Staff will assign points based on engineering experience and OPWC defined delinquent projects. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. A jurisdiction receiving approval for a project and subsequently cancelling the same after the bid date on the application may be considered as having a delinquent project.

### Criterion 2 - CONDITION

Condition is based on the amount of deterioration that is field verified or documented exclusive of capacity, serviceability, or health, safety and welfare issues. Condition is rated only on the existing facility being repaired or abandoned. If the existing facility is not being abandoned or repaired, but a new facility is being built, it shall be considered as an expansion project. (Documentation may include ODOT BR-86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included with the original application.)

#### Definitions:

FAILED CONDITION - Requires complete reconstruction where no part of the existing facility is salvageable. (e.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system; Hydrants: completely non-functioning and replacement parts are unavailable.)

CRITICAL CONDITION - Requires moderate or partial reconstruction to maintain integrity. (e.g. Roads: reconstruction of roadway, curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system; Hydrants: some non-functioning, others obsolete and replacement parts are unavailable.)

VERY POOR CONDITION - Requires extensive rehabilitation to maintain integrity. (e.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or minor replacement of pipe sections; Hydrants: non-functioning and replacement parts are available.)

POOR CONDITION - Requires standard rehabilitation to maintain integrity. (e.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs; Hydrants: functional, but leaking and replacement parts are unavailable.)

MODERATELY POOR CONDITION - Requires minor rehabilitation to maintain integrity. (e.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair; Hydrants: functional and replacement parts are available.)

MODERATELY FAIR CONDITION - Requires extensive maintenance to maintain integrity. (e.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

FAIR CONDITION - Requires routine maintenance to maintain integrity. (e.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

GOOD OR BETTER CONDITION - Little or no maintenance required to maintain integrity.

#### Criterion 4 - *HEALTH, SAFETY & WELFARE*

##### *Definitions:*

SAFETY - The design of the project will prevent accidents, promote safer conditions, and eliminate or reduce the danger of risk, liability, or injury.

*EXAMPLES:* Widening existing roadway lanes to standard lane widths; Adding lanes to a roadway or bridge to increase capacity or alleviate congestion; replacing old or non-functioning hydrants; increasing capacity to a water system, etc.

HEALTH - The design of the project will improve the overall condition of the facility so as to reduce or eliminate disease; or correct concerns regarding the environmental health of the area.

*EXAMPLES:* Improving or adding storm drainage or sanitary facilities; replacing lead joints in water lines;

WELFARE - The design of the project will promote economic well-being and prosperity.

*EXAMPLES:* Project has the potential to improve business expansions or opportunities in the area; project will improve the quality of life in the area;

PLEASE NOTE: The examples listed above are NOT a complete list, but only a small sampling of situations that may be relevant to any given project. Each project is looked at on an individual basis to determine if any aspects of this rating category apply.

#### Criterion 9 - *REGIONAL IMPACT*

##### *Definitions:*

MAJOR IMPACT - Roads: major multi-jurisdictional route, primary feed to an interstate, Federal Aid Primary routes; Underground: primary water or sewer main serving and entire system; Hydrants: multi-jurisdictional.

MODERATE IMPACT - Roads: principal thoroughfares, Federal Aid Urban routes; Underground: primary water or sewer main serving only part of a system; Hydrants: all hydrants in a local system serving only one jurisdiction.

MINIMAL/NO IMPACT - Roads: cul-de-sacs, subdivision streets; Underground: individual water or sewer main not part of a large system; Hydrants: only some hydrants in a local system serving only one jurisdiction.